Subpart 76.10—Fire Main System, Details

§ 76.10-1 Application.

(a) The provisions of this subpart, with the exception of \$76.10–90, shall apply to all fire main installations contracted for on or after May 26, 1965. Installations contracted for prior to May 26, 1965, shall meet the requirements of \$76.10–90.

(b) [Reserved]

§ 76.10-3 Water availability.

(a) On all vessels on an international voyage, regardless of the date of construction, water pressure from the firemain protecting enclosed spaces shall be immediately available by maintenance of water pressure on the firemain at all times when passengers are aboard the vessel, or by remote control of fire pumps which control shall be easily operable and readily accessible.

(b) Where approved remote controls are not installed, an alarm shall be fitted which will sound in the engine room indicating a drop of water pressure on the system.

[CGFR 67-87, 32 FR 19181, Dec. 20, 1967]

§ 76.10-5 Fire pumps.

(a) Vessels shall be equipped with independently driven fire pumps in accordance with table 76.10–5(a).

TABLE 76.10-5(a)

Gross tons		Minimum number of				
Over	Not over	pumps		Hose and	Noz- zle	Length
		Inter- na- tional voy- age	Other	hy- drant size, inches	orifice size, inches	of hose, feet
	100	2	1	11/2	1/2	50
100	500	2	1	11/2	5/8	50
500	1,500	2	2	11/2	5/8	50
1,500	4,000	2	2	1 21/2	17/8	1 50
4,000		3	3	1 21/2	1 7/8	1 50

 175 feet of $1^1\!/\!_{2}$ inch hose and $^5\!/\!_{8}$ inch nozzles may be used where specified by $\$\,76.10{-}10(b).$

(b) Vessels on an international voyage shall have a minimum total fire pump capacity at least equal to two-thirds of the required total bilge pump capacity, but in no case less than that required by this section. Each of the

required fire pumps shall have a capacity not less than 80 percent of the total required capacity divided by the number of required pumps.

- (c) Each pump shall be capable of delivering water simultaneously from the two highest outlets at a Pitot tube pressure of approximately 50 p. s. i. Where one or both of these outlets is a 1½-inch siamese fitting, both branches of the siamese fitting at each such outlet shall be utilized for the purpose of this requirements.
- (d) Fire pumps shall be fitted on the discharge side with relief valves set to relieve at 25 p. s. i. in excess of the pressure necessary to maintain the requirements of paragraph (c) of this section or 125 p. s. i., whichever is greater. Relief valves may be omitted if the pumps, operating under shutoff conditions, are not capable of developing a pressure exceeding this amount.
- (e) Fire pumps shall be fitted with a pressure gauge on the discharge side of the pumps.
- (f) Fire pumps may be used for other purposes provided at least one of the required pumps is kept available for use on the fire system at all times. In no case shall a pump having connection to an oil line be used as a fire pump. Branch lines connected to the fire main for purposes other than fire and deck wash shall be arranged so that the requirements of paragraphs (b) and (c) of this section and any other services installed on the fire main can be met simultaneously.
- (g) The total area of the pipes leading from a pump shall not be less than the discharge area of the pump.
- (h) If a vessel uses main or auxiliary oil fired boilers or internal combustion propulsion machinery, and is required to have two fire pumps, the pumps must be in separate spaces and the arrangement of pumps, sea connections, and sources of power must be arranged to ensure that a fire in any one space will not put all of the fire pumps out of operation. However, in vessels of less than 300 feet in length, when it is shown to the satisfaction of the Commandant that it is unreasonable or impracticable to meet this requirement due to the size or arrangement of the